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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,386	10/07/2003	Anand Prahlad	606928008US1	6393
25096	7590	10/28/2008	EXAMINER	
PERKINS COIE LLP			RUTZ, JARED IAN	
PATENT-SEA			ART UNIT	PAPER NUMBER
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SEATTLE, WA 98111-1247				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/681,386	<b>Applicant(s)</b> PRAHLAD ET AL.
	<b>Examiner</b> JARED I. RUTZ	<b>Art Unit</b> 2187

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

#### Status

- 1) Responsive to communication(s) filed on 09 September 2008.  
 2a) This action is FINAL.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3,6,7,9,14,15 and 17 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 1-3,6,7,9,14 and 15 is/are allowed.  
 6) Claim(s) 17 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 07 October 2003 and 28 April 2008 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsman's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 4/16/2008,7/7/2008,9/9/2008
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-3, 6, 7, 9, 14, 15, and 17, as amended on 7/30/2008, are pending in the instant application. Applicant's arguments submitted 4/16/2008 have been carefully and fully considered, but are moot in light of the new grounds of rejection presented herein.

***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/30/2008 has been entered.

***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on 4/16/2008 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

4. The information disclosure statement (IDS) submitted on 7/7/2008 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

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5. The information disclosure statement (IDS) submitted on 9/9/2008 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Drawings***

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the step of storing the application specific information/characteristics to the quick recovery volume and the quick recovery volume storing the application specific information/characteristics must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claim 17** is rejected under 35 U.S.C. 102(e) as being anticipated by Armangau et al. (US 6,792,518).

**Claim 17** is taught by Armangau as:

*A method of managing stored data in a storage management system, the storage management system including a storage manager, a media agent connected to the storage manager, and a primary volume connected to the media agent, the method comprising: performing a snapshot of the primary volume wherein the snapshot tracks data blocks of the primary volume. Figure 9 shows taking a new snapshot. Item 83 of figure 3 shows that the queue entry includes a new snapshot file system, snapshot volume, delta volume, bit map,*

block map, and save volume. Column 7 lines 37-42 shows that the bit map is used to track which tracks have been copied to the save volume.

*Identifying characteristics associated with the data blocks tracked by the snapshot. Column 7 lines 24-47 show that the block map is used to determine the save volume address of a clone volume track that has been copied to the save volume.*

*And storing the characteristics in an index that associates the data blocks of the primary volume with portions of the snapshot that track the data blocks.*

Column 7 lines 24-32 shows that the address translation between clone volume address and save volume address is stored in a table as the block map.

*Copying the data blocks tracked by the snapshot to a destination volume via the snapshot. Column 8 lines 59-67 shows that the block to be written is copied to the save volume from the clone volume if it has not already been copied, as indicated by the bit map. Figure 8 shows save volume 38, bit map 39, and block map all being part of queue entry 71.*

*And deleting the snapshot. Figure 40 shows deleting a snapshot.*

*And storing the index to the destination volume. Figure 8 shows that queue entry 71 includes bit map 39 and block map 40.*

#### ***Response to Arguments***

9.     Applicant's arguments with respect to claim 17 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

10. **Claims 1-3, 6, 7, 9, 14, and 15** are allowed.
11. **Claim 1** recites the limitation "*selecting the first snapshot as a source of data to copy to a quick recovery volume, wherein the quick recovery volume includes information about an application that created the data of the primary volume.*" Said limitation is supported by the specification as originally filed at least at paragraph 00084. Said limitation, in combination with the other recited limitations of claim 1, and as argued by Applicant at the first paragraph beginning on page 8 of the remarks filed 4/16/2008, is not taught or suggested by the prior art of record.
12. **Claims 2, 3, 6, 7, and 9** depend from claim 1, and are considered allowable for at least the same reasons as claim 1.
13. **Claim 14** recites the limitation "*storing the first snapshot and the associated application specific information to a destination volume, wherein storing the first snapshot and the associated application specific information creates a copy of the primary volume that facilitates a logical connection between the first snapshot of the data and an application that created the data.*" Said limitation is supported by the specification as originally filed at least at paragraph 00084. Said limitation, in combination with the other recited limitations of claim 14, and as argued by Applicant at the first paragraph beginning on page 8 of the remarks filed 4/16/2008, is not taught or suggested by the prior art of record.

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**Claim 15** depends from claim 14, and is considered allowable for at least the same reasons as claim 14.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JARED I. RUTZ whose telephone number is (571)272-5535. The examiner can normally be reached on M-F 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Ellis can be reached on (571)272-4205. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jared I Rutz  
Examiner  
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/Kevin L Ellis/  
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